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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,199	12/29/2000	Dean Throop	40921/250098	8124

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EXAMINER	
SCHNEIDER, JOSHUA D	

ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/752,199	THROOP, DEAN	
	Examiner	Art Unit	
	Joshua D. Schneider	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8-17 and 19-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8-17 and 19-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 13 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-6, 8-17, and 19-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,567,853 to Sholmer in further view of the definitions servers from Newton's Telecom Dictionary and TCP/IP.

4. With regards to claims 1 and 13, Sholmer teaches establishing network connections through a SCSI cable between a server (Fig. 1A, element 110) and a target device (Fig. 1A, element 120) and between a server (Fig. 1A, element 110) and a workstation (Fig. 1A, element 100), establishing a direct IP connection between a workstation making up part of a computer system and a target device on a network (Fig. 1, element 150, column 3, lines 48-61); encoding a SCSI request with a tag identifying the request as a SCSI request (inherent to accessing a SCSI device), and structuring the request with a request IP/ID (column 3, lines 48-61, inherent to the use of TCP/IP, and column 5, lines 3-52); sending the tagged SCSI request to the target device (column 3, lines 48-61, and column 5, line 53, through column 6, line 16); returning the request IP/ID of the SCSI request from the target device to the computer system (inherent to TCP/IP,

column 3, lines 48-61, and column 5, line 53, through column 6, line 16). Sholmer does not explicitly teach the use of the host being called a workstation. However, as evidenced by Newton's Telecom Dictionary, a terms server and client are simply labels that define the role that software performs for a particular transaction. It would have been obvious to one of ordinary skill in the art at the time of invention to use the by the client accessing target device over a TCP/IP network connection, client is acting as a workstation that is requesting service over the network connection without the use of a server.

5. With regards to claims 2 and 14, Sholmer teaches structuring and encoding the field of the SCSI request which is direct from the workstation (column 5, lines 3-52) in a manner substantially the same as a direct SCSI request from a host system making up part of the computer system to a target device (column 5, lines 3-52, inherent to the use of a protocol defined network). Sholmer also inherently teaches the structuring and encoding being done using CTLD wherein the SCSI request is prefixed with a CTLD header that defines the request type and length, as this information is part of the defined packet headers required by TCP/IP.

6. With regards to claims 6, 8, 17, and 19, Sholmer teaches the target device is a storage system (Fig. 1, element 120).

7. With regards to claims 9, 20, and 23, Sholmer teaches a server connected to the storage system through SCSI cable, a workstation connected to the server, and further comprising the workstation directly connected to the storage system for establishing the IP connection with the storage system (column 3, lines 48-61, and column 5, lines 3-52). Sholmer teaches server client relationship establishment (column 5, lines 3-52). This relationship is also inherent to the connection establishment under the TCP portion of the TCP/IP protocol.

8. With regards to claims 10, 21, and 25, Sholmer does not explicitly teach denying a connection from the workstation to the target device if a request from the workstation does not include a recognized IP/ID, but such a denial is inherent to TCP/IP, and thus this limitation must be inherently taught.

9. With regards to claims 11 and 24, Sholmer does not explicitly teach denying a connection from the computer system to the target device if the time for reading a completed message exceeds a predetermined amount of time, but such a denial is inherent to TCP/IP, and thus this limitation must be inherently taught.

10. With regards to claim 12, Sholmer teaches a direct connection is established on a network separate from a SCSI cable connection between the host system and the target device (Fig. 1, elements 100, 110, and 120 by connections 130, 140, and 150, column 3, lines 19-61).

11. With regards to claims 3 and 15, Sholmer teaches sending SCSI request over an Ethernet connection using the TCP/IP protocol, but does not explicitly teach and the encoding including a data buffer containing data to allow the target device to read the data buffer using the established TCP/IP connection. However, it was notoriously well known in the art at the time of invention that receive and transmit buffers were used in popular commercially available Ethernet chips used to implement the LAN and IP environments taught by Sholmer. It would have been obvious to one of ordinary skill in the art to use transmit and receive Ethernet buffering to facilitate SCSI transfers over a TCP/IP protocol.

12. With regards to claim 4, Sholmer teaches sending SCSI request over an Ethernet connection using the TCP/IP protocol, but does not explicitly teach sending the data in conjunction with the SCSI request in a manner substantially different from direct SCSI requests

from a host system to a target device, and which allows the host system to supply the data buffer without an explicit request from the target system, whereby the target system is allowed to receive the data immediately following the request without having to make an explicit request to obtain the data buffer. However, it was notoriously well known in the art at the time of invention, that receive and transmit buffers were used in popular commercially available Ethernet chips. It would have been obvious to one of ordinary skill in the art to use transmit and receive Ethernet buffering to facilitate SCSI transfers over a TCP/IP protocol.

13. With regards to claims 5 and 16, Sholmer does not explicitly teach sending SCSI request over an Ethernet connection using the TCP/IP protocol and returning a data buffer generated by the target device to the workstation using the established TCP/IP connection. However, it was notoriously well known in the art at the time of invention, that receive and transmit buffers were used in popular commercially available Ethernet chips. It would have been obvious to one of ordinary skill in the art to use transmit and receive Ethernet buffering to facilitate SCSI transfers over a TCP/IP protocol.

14. With regards to claims 26 and 27, Sholmer teaches a computer system comprises a host and a workstation connected directly thereto, each containing software for cooperation with each other and further comprising operating said software to construct SCSI requests to send over a direct TCP/IP connection between the workstation and target device (column 5, line 3, through column 6, line 16).

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,931,450 to Howard et al. teaches a direct client to storage system connection for data transfer.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D. Schneider whose telephone number is (571) 272-4158. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JDS

KIM HUYNH
SUPERVISORY PATENT EXAMINER
6/09/06